

SPLIT-

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: D Date: 02/09/19  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



Date: Wednesday, 7/25/2007 12:19:52 PM

User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEP EXTRUSION

Job Number: 33733

Part Number: D2244116

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock (lin feet)

Location: 4/A

G.M

07.09.10

(39)

6.0

QC21

FINAL INSPECTION/W/O RELEASE



(39)

Comment: FINAL INSPECTION/W/O RELEASE

07/09/19

Job Completion



07.09.19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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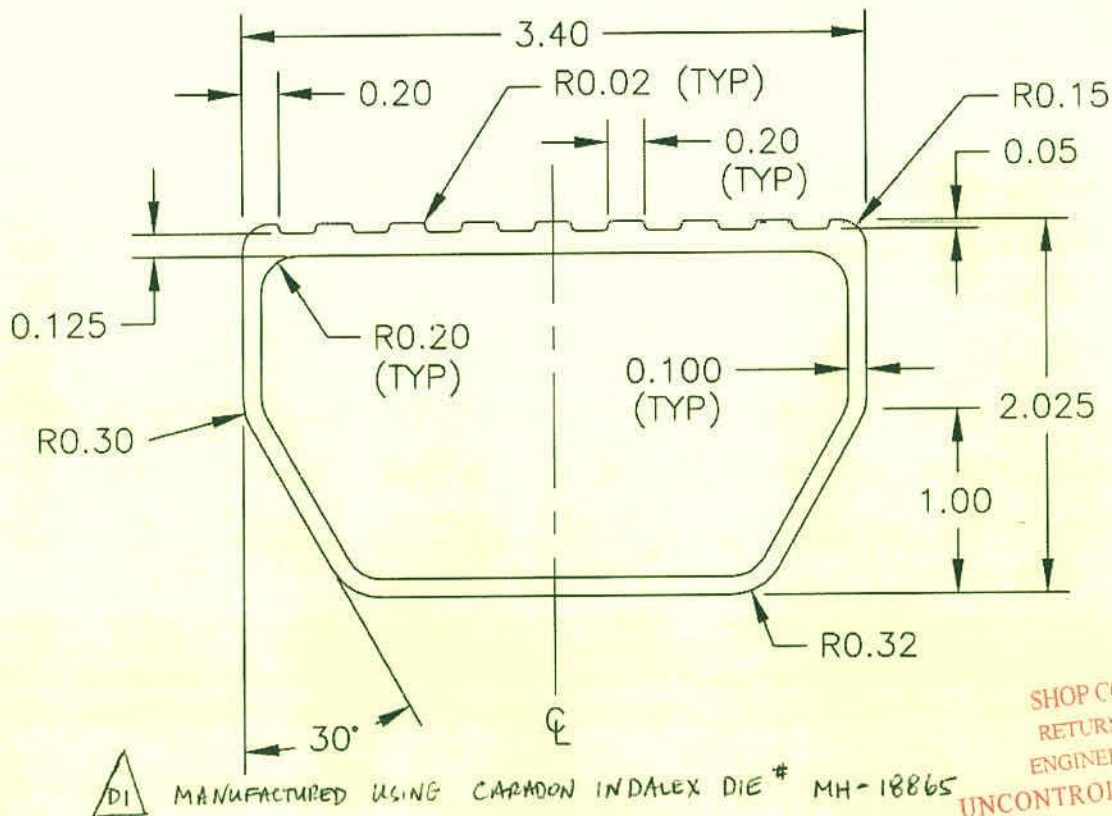
**NOTE:** Date & initial all entries





DESIGN BW	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2244	REV. D SHEET 1 OF 1
DATE 98.11.18	TITLE STEP EXTRUSION	SCALE 1:1	
A	94.07.05	NEW ISSUE	
B	94.07.11	REDESIGNED	
C	94.08.08	REDESIGNED	
D	98.11.18	REMOVED 6005A MATERIAL INCORPORATED DEO 9081	
D1	01.04.17	ADDED DIE # <i># 40</i>	

RELEASED  
*18.11.25 KE*



PART NUMBER D2244-XX.X  
XX.X IS CUT LENGTH IN INCHES

MATERIAL: 6061-T6 (QQ-A-200/8)

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY TO ENSURE THAT THE BATCH MEETS THE MINIMUM MECHANICAL PROPERTIES STATED BELOW:

MINIMUM TENSILE YIELD STRENGTH = 35 ksi  
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi  
MINIMUM ELONGATION = 8%

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED  
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. *33733*







**DART AEROSPACE LTD**  
**1270 ABERDEEN STREET**  
**HAWKESBURY, ONT**

INDICATIONS SPÉCIALES  
SPECIAL INSTRUCTIONS

7072353 1

MÊME - SAME

K6A1K7

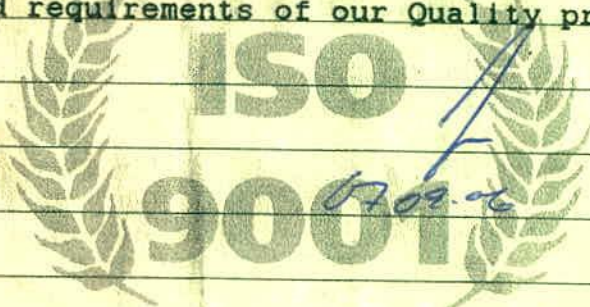
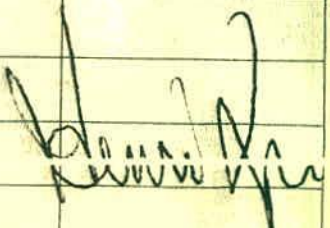
CUSTOMER P.S.T. : \*6122-5207

INDALEX G.S.T. REG NO: R136834041

Required Date:

N° DU CLIENT CUST. NO.		T.P.S. G.S.T.		TAXE DE VENTE PROV. PROV. SALES TAX		N° DE COMM. DU CLIENT CUST. ORDER NO.		DATE DE COMMANDE ORDER DATE		NOTRE DATE DE COMM. OUR ORDER DATE		CONDITIONS TERMS	
201355		XXXXXX				4253		7/07/25		7/07/25			
VENDEUR/ SALESMAN		EXPÉDIE PAR SHIP VIA		PAYE P.D.		P.E.R.C. COL.		O.A.D. F.A.B. C.O.D. F.O.B.		EN BALLOTS BUNDLED AND TAPED		CARTONNÉ CARTONED	
51		NOTRE CAMION OUR TRUCK		<input checked="" type="checkbox"/>		<input type="checkbox"/>		NOTRE USINE OUR PLANT		<input type="checkbox"/>		<input type="checkbox"/>	
										CARTONNÉ & INTERCALE CARTONED & INTERLEAVED		<input type="checkbox"/>	

DATE DE LIVRAISON DATE SHIPPED	ENVOYÉ PAR SHIPPED VIA
7/08/09	ONTARIO 10 08 2009

COMMANDE / ORDERED		N. DE MATRICE INDEX DIE NO.		DESCRIPTION DU CLIENT CUSTOMER DESCRIPTION		ALLIAGE ET TREMPAGE ALLOY AND TEMPER		LONGUEUR LENGTH		PRIX UNITAIRE UNIT PRICE		7/08/09		ONTARIO 10 08 200				
POIDS WEIGHT	PIECES PIECES											COMMANDE / ORDERED		CETTE EXPEDITION THIS SHIPMENT		MONTANT AMOUNT		
													POIDS WEIGHT	PIECES PIECES	BALLOTS BOXES	POIDS WEIGHT	PIECES PCS	
F EXTRUDE ONLY																		
DUE=2007/08/10 ASAP																		
1	500	86	MH 18865 D2244	6061	T6	2946												
STEP EXTRUSION																		
BUNDLE= 778194✓ 778202✓ 778204✓																		
We hereby certify that the material supplied meets the chemical properties as published by the Aluminum Association, and requirements of our Quality procedures																		
																		
																		

FORM 118YE / REV. 09/00 H.M.

FORM 118XF / REV. 09/00 H+H

**EXEMPLAIRE DE LA COMPTABILITÉ**  
**ACCOUNTING COPY**

**FEUILLE D'EMPAQUETAGE  
PACKING SLIP**









325 rue Avro  
Pointe-Claire QC H9R 5W3

Téléphone (514) 697-5120  
Fac-simile (514) 694-8310

## Rapport des propriétés mécaniques Mechanical Properties Test Report

Client / Customer : DART AEROSPACE LTD  
Adresse / Address : 270 ABERDEEN STREET  
HAWKESBURY ONT,  
K6A 1K7

# commande Indalex / Indalex order # : 7072353  
# bon de commande / Purchase order # : 4253  
# de matrice / Die # : MS 18865 Description : Step Extrusion  
Alliage & trempage / Alloy & temper : 6061 T6  
# Contrôle / Control # : 53143-1  
# Coulée / Cast # : 41148

	Min.requis Min. required	Résultat actuel Actual results
Tension ultime Ultimate stress (psi)	38 000	41184
Contrainte élastique Yield stress (psi)	35 000	36497
% élongation dans 2" % elongation in 2"	8	12
Dureté Rockwell E (hre) Rockwell E Hardness (hre)	81 @ 100	90

Composition chimique typique / Typical chemical composition :

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
6063	0.20 - 0.60	0.35 Max	0.10 Max	0.10 Max	0.45 - 0.90	0.10 Max	0.10 Max	0.10 Max
6005	0.60 - 0.90	0.35 Max	0.10 Max	0.10 Max	0.40 - 0.60	0.10 Max	0.10 Max	0.10 Max
6005A	0.68 - 0.72	0.15 - 0.27	0.08 - 0.12	0.21 - 0.24	0.48 - 0.52	0.03 Max	0.05 Max	0.03 Max
6061	0.40 - 0.80	0.70 Max	0.15 - 0.40	0.15 Max	0.80 - 1.20	0.04 - 0.35	0.25 Max	0.15 Max
6351	0.7 - 1.3	0.5 Max	0.10 Max	0.41 - 0.80	0.40 - 0.80	—	0.20 Max	0.20 Max

Nous certifions que le matériel fourni rencontre les exigences chimiques telles qu'annoncées par la norme ASTM B-221 excepté pour la section 8.2 (nombre de spécimen) et AMS QQA 200/8 excepté pour la section 4.2.3.1 (nombre de spécimen) qui sont déterminés par les exigences du client.

We hereby certify that the material supplied meets the chemical properties as published by the ASTM B-221 except for section 8.2 (number of specimen) and AMS QQA 200/8 except for section 4.2.3.1 (number of specimen) which is determined by customer requirement.

Sincèrement vôtre,

date : 2007-01-03

Yours truly,

Mark Oliver Kokiong  
Technicien de la qualité

Indalex Limited

